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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/590,521 | 06/09/2000 | Arturo A. Rodriguez | A-5704 | 1994 |
| 5642 | 7590 08/28/2002 | | | |
| SCIENTIFIC-ATLANTA, INC. INTELLECTUAL PROPERTY DEPARTMENT 5030 SUGARLOAF PARKWAY LAWRENCEVILLE, GA 30044 | | | EXAMINER | |
| | | | TRAN, HAI V | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2611 | in |
| | | | DATE MAILED: 08/28/2002 | 12 |

Please find below and/or attached an Office communication concerning this application or proceeding.

9



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| APPLICATION NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO. | |
| 09 590,521 | | | | |

EXAMINER ART UNIT PAPER NUMBER 12 2611

DATE MAILED:

This is a communication from the examiner in charge of your application. COMMISSIONER OF PATENTS AND TRADEMARKS

| OFFICE ACTION SUMMARY | | | | | |
|--|---|--|--|--|--|
| Responsive to communication(s) filed on 6/24/02 | | | | | |
| ☐ This action is FINAL . | | | | | |
| ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 D.C. 11; 453 O.G. 213. | | | | | |
| A shortened statutory period for response to this action is set to expire month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). | | | | | |
| Disposition of Claims | | | | | |
| Claim(s) 2-6, 9-13, 15 and 27-29 | is/are pending in the application. | | | | |
| Of the above, claim(s) | is/are withdrawn from consideration. | | | | |
| ☐ Claim(s) | | | | | |
| ☑ Claim(s) 2-6, 9-13, 15 and 27-29 | | | | | |
| ☐ Claim(s) | is/are objected to. | | | | |
| ☐ Claims | are subject to restriction or election requirement. | | | | |
| Application Papers | | | | | |
| ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. | | | | | |
| ☐ The drawing(s) filed on is/are | | | | | |
| ☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved. | | | | | |
| ☐ The specification is objected to by the Examiner. | | | | | |
| ☐ The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 | P(a)-(d). | | | | |
| ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority docume | ents have been | | | | |
| received. | • | | | | |
| received in Application No. (Series Code/Serial Number) | <u></u> . | | | | |
| received in this national stage application from the International Bureau (PC | T Rule 17.2(a)). | | | | |
| *Certified copies not received: | | | | | |
| Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 1 | 19(e). | | | | |
| Attachment(s) | | | | | |
| X Notice of Reference Cited, PTO-892 | | | | | |
| ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). | | | | | |
| ☐ Interview Summary, PTO-413 | | | | | |
| ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 | | | | | |
| ☐ Notice of Informal Patent Application, PTO-152 | | | | | |

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DETAILED ACTION

Claim Rejections - 35 U.S.C. § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 4, 5, 10, 11, 15 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (6,401,243).

Considering claim 27, Suzuki discloses a fiber optic system for delivering user requested digital programming meeting the claimed "digital broadband delivery system" (see col 6 lines 1-15) wherein a information transmission control means (col 13 lines 37-40) allocates bandwidth to at least two different content delivery modes, a A-class demand mode, a B-class demand mode and a C-class demand mode (see col 13 lines 24-33, col 15 lines 1-7) which apply to a plurality of downstream channels (col 13 lines 24-33). Further, Suzuki discloses a user demand request, wherein the demand request specifies the date and time that the subscriber wishes to reserve the program in the future (col 15 lines 1-5, col 14 lines 54-64) note; although the date is not specifically disclosed by Suzuki, requesting a C-class demand for programming is delivered in the future, i.e. one day (see col 15 lines 1-7) thus the date of delivery must inherently be included in

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the request to differentiate a same day delivery from a one-day delivery. Suzuki also discloses a plurality of preferences which identify the program requested (col 14 lines 54-59) and a fee the subscriber is willing to pay for the type of demand request for reserving a channel (col 13 lines 24-34, col 16 lines 1-7), note; if the subscriber requests an A-demand, the subscriber is willing to pay a higher price for programming, if the subscriber requests a B-demand or C-demand, the subscriber is willing to pay less for programming.

Regarding claim 28, claim 28 discloses the same subject matter as claim 27 and is rejected for at least the same reasons as provided above. Claim 28 recites the additional limitation "a bandwidth allocation manager determines a bandwidth allocation schedule in the digital broadband delivery system based at least partially on the a subscriber reservation request". Suzuki discloses transmitting requested information according to a demand request specifying the time of delivery (col 16 lines 24-33, col 14 lines 55-64, Abstract). It order to provide programming according to a time specified by a user, the server in Suzuki must inherently include a bandwidth allocation manager which determines a bandwidth allocation schedule based at least partially on the subscriber demand request. Further, claim 28 recites "a network allocation manager allocates bandwidth according to the bandwidth allocation schedule determined by the bandwidth allocation manager". As discussed above, Suzuki discloses scheduling programming for delivery according to user specified time. Suzuki further discloses allocating demand channels, A-demand, B-demand and C-demand according to a user specified time (col 16 lines 24-33, col 14 lines 55-64)

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and providing the allocated channels according to a schedule as discussed above, thus Suzuki discloses the claimed limitation.

Regarding claim 29, claim 29 recites the same limitations recited in claims 27 and 28 above, with the further limitation of a interface unit and tuner. Suzuki discloses a user interface (col 15 lines 19-21) and discloses a subscriber terminal (see fig 10) with a demand transmission means 11 which transmits the subscriber criteria to the CATV headend for allocating channels (bandwidth) according the user requested demand (col 15 lines 1-7, col 16 lines 47-67) and thus discloses the claimed "tuner".

Considering claim 4, see claim 27.

Considering claims 5 and 11, Suzuki discloses a reservation request for reserving a channel in a VOD system wherein the reservation request includes time information relating to the urgency of the requested transmission and the desired transmission format (see col 14 lines 54-64). The 'time information' and 'transmission format' meet the claimed "at least two assigned priorities" limitation.

Considering claim 10, see claim 27.

Considering claim 15, Suzuki discloses a receiver (inherently comprising a tuner) which receives channel allocation information from the transmission planning means and processes the information into a format suitable for presentation to the subscriber (col 21 lines 35-49).

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Claim Rejections - 35 U.S.C. § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 2, 3, 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Brown (5,771,435, previously cited).

Regarding claims 2 and 9, Suzuki discloses a plurality of VOD modes including an Ademand mode, B-demand mode and a C-demand mode but fails to disclose at least two content delivery modes selected from the group consisting of pay-per-view, VOD and N-VOD..

Brown teaches by providing two content delivery modes including VOD and N-VOD network resources can be conserved when constraints on the system are caused by too many VOD requests (col 7 lines 12-21). It would have been obvious modifying Suzuki to further include two content delivery modes including VOD and N-VOD would conserve network resources when an excessive amount of request for VOD transmission are received. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Suzuki based on the teachings of Brown to include a VOD delivery mode and a N-VOD delivery mode to conserve network resources.

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Regarding claims 3 and 13, Suzuki discloses a plurality of VOD modes including an Ademand mode, B-demand mode and C-demand mode but fails to disclose wherein at least one content delivery mode comprises a video content delivery mode wherein at least three instances of a same video content are transmitted at time-spaced intervals of varying length.

Brown teaches by providing a VOD delivery mode and a N-VOD delivery mode which provide time shifted versions of the same video, network resources can be conserved when constraints on the system are caused by too many VOD requests (col 7 lines 12-21). It would have been obvious providing a VOD delivery mode and a N-VOD delivery mode with at least three instances of the same video content transmitted at time-spaced intervals of varying length would conserve network resources when an excessive amount of requests for VOD transmission are received. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Suzuki in view of Brown to include a VOD delivery mode and a N-VOD delivery mode with at least three instances of the same video content transmitted at time-spaced intervals of varying length to conserve network resources.

5. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Haddad (5,835,843).

Regarding claims 6 and 12, Suzuki discloses allocating bandwidth at a request time by processing a plurality of demand requests from subscribers, i.e. A-demand, B-demand and C-demand, wherein the demand requests specify a time for delivery (col 15 lines 1-7, col 15 line 66 -

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col 16 line 8, col 16 lines 47 +). Since the requests are processed and the programming is delivered at the specified time by adjusting the bandwidth accordingly (col 13 lines 24-34, col 16 lines 34-67), a "statistical model to determine an adjusted bandwidth allocation schedule" must inherently be included in determining when to transmit the requested program based on the requested delivery time. Suzuki fails to disclose wherein the statistical model assigns a weight to each of the allocation criteria, and wherein the assigned weight determines the priority given to each allocation criteria.

Haddad teaches a video distribution center for distributing requested video to viewers (Abstract) wherein a order processing computer weighs each request and schedules and delivers in successive weight order (col 18 lines 33-37). It would have been obvious including a statistical model to assign a weight and resulting priority in Suzuki would have ensured each request would been processed and delivered in accordance with a delivery schedule ensuring the requested program is delivered at the user specified delivery time. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Suzuki to include a statistical model for assigning weight to each of the allocation criteria to ensure the requested program is delivered to the user at the user specified delivery time.

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Allowable Subject Matter

6. The indicated allowability of claims 27-29 is withdrawn in view of the newly discovered reference(s) to Suzuki. Rejections based on the newly cited reference(s) is provided above.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Arias et al (6,118,976) - Asymmetric data communications system

Ganek et al (5,682,597) - Hybrid VOD and NVOD system

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

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(703) 308-5399 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Vivek Srivastava whose telephone number is (703) 305 - 4038. The

examiner can normally be reached on Monday - Thursday from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andy Faile, can be reached at (703) 305 - 4380.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the group receptionist whose telephone number is (703) 305 - 3900.

VS

5/19/02

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600